

N° 37



A.D. 1913

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COMPLETE SPECIFICATION.

A Method of and Apparatus for Preparing Sheets from Crude Rubber Lump.

I, JAMES DONNELLY, of 21, Mincing Lane, in the City of London, Company Manager, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

5 This invention relates to a method of and apparatus for preparing sheets from crude rubber lump and has for its object to produce an article more marketable than the crude lump.

10 According to the present invention the method consists in slicing the rubber lump into sheets, simultaneously washing it and subsequently rolling the sheets.

A machine for carrying out this method comprises a guillotine knife for cutting the rubber lump into sheets, means for intermittently feeding the rubber up to the knife, a spray or jet for washing the rubber and one or more pairs of rollers for subsequently rolling the sheets.

15 Preferably a spring controlled presser bar holds the rubber tightly during the cutting stroke, and is raised by the upward movement of the knife to release the rubber in order to allow the latter to be fed forward for the next cut.

The invention will now be described with reference to the accompanying drawings which illustrate one method of carrying it into effect.

20 In these drawings:—

Figure 1 is a front elevation of the improved machine.

Figure 2 is a side elevation of the same,

Figure 3 is a back view of a portion of the machine drawn to a larger scale.

Figure 4 is a vertical section on the line X, X, Figure 3.

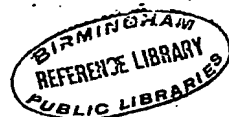
25 Figure 5 is a section on the line Y, Y, Figure 3 as viewed from above, and

Figure 6 is a section on the line Z, Z, Figure 3.

Like letters indicate like parts throughout the drawings.

The bed A carries a table A¹ on which are secured two pairs of uprights B, B¹, and B², B³, that form guides for a guillotine knife C. A transverse shaft D carries two cranks D¹ and D², on the pins of which are mounted collars E, E¹, which are provided with radial trunnion bearings. Two links F, F¹, have their forked ends F², F³, pivoted to the trunnions of the collars E, E¹ respectively, the other ends of the links being connected to the guillotine knife C through jointed connections G, G¹. The uprights B, B², carry two rollers H, H¹, which work within inclined grooves C¹, C² formed in the knife C. J is a pusher board carried by a rack J¹ slidably mounted within guides J² secured to the underside of the table A¹ said rack gearing with a pinion K mounted on a transverse shaft L. This shaft L carries a pawl and ratchet mechanism at one end, the pawl M being mounted on a swinging arm M¹ which is connected to the knife by means of a chain N. A stop O is provided to limit the downward movement of the arm M¹.

[Price 8d.]



A Method of and Apparatus for Preparing Sheets from Crude Rubber Lump.

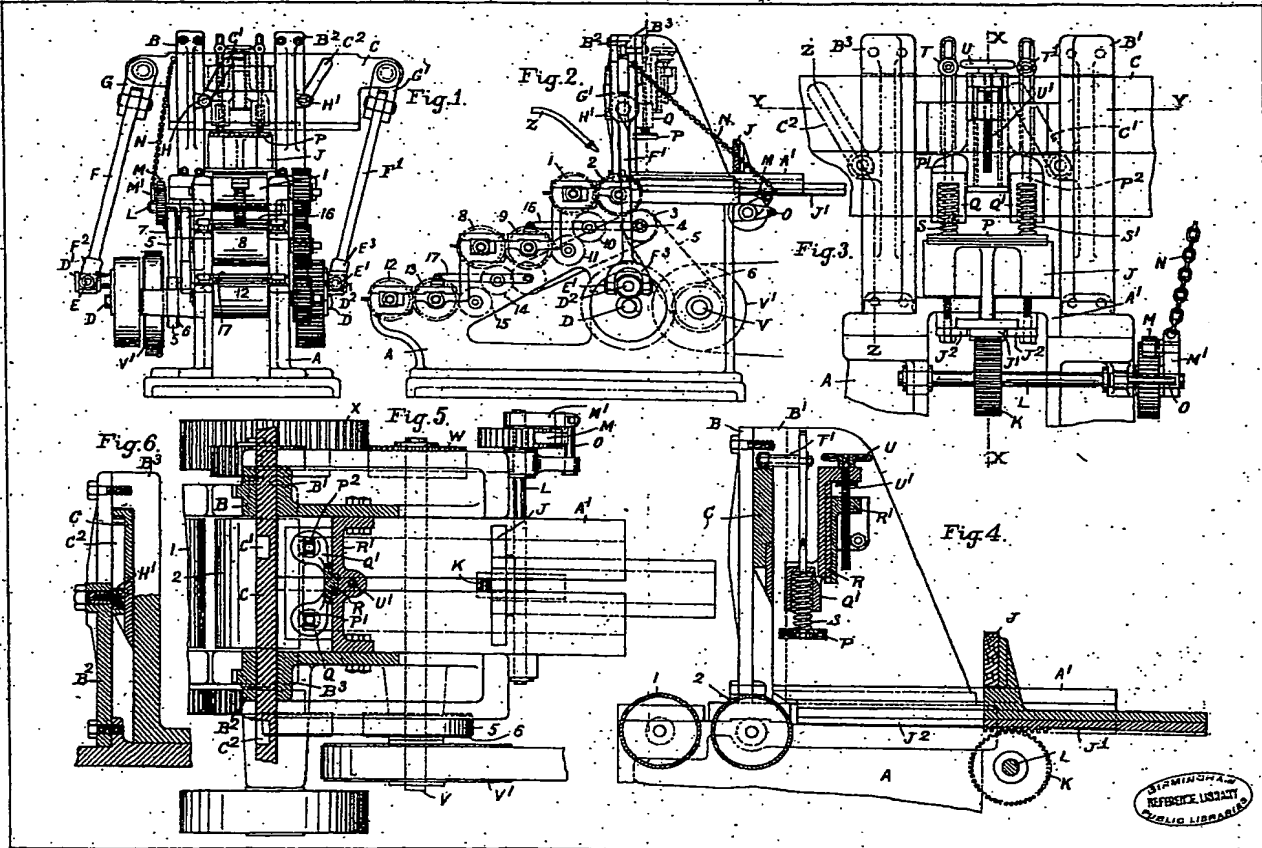
Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is:—

1. A method of preparing sheets from crude rubber lump consisting in slicing
5 the rubber lump into sheets, simultaneously washing the same and subsequently rolling the sheets.
2. A machine for carrying out the method of Claiming Clause 1, comprising a guillotine knife for cutting the crude rubber into sheets, means for intermittently feeding the rubber up to the knife, a spray or jet for washing the
10 rubber and one or more pairs of rollers for subsequently rolling the sheets of rubber for the purpose described.
3. The combination with the parts set forth in Claim 2 of a spring controlled presser bar which holds the rubber tightly during the cutting stroke and which is raised by the upward movement of the knife to release the rubber and allow
15 it to be fed forward by the feeding mechanism.
4. A construction according to Claiming Clause 2 in which three pairs of rollers are provided for rolling the rubber the first pair having grooved surfaces, the second pair roughened surfaces, and the third pair smooth surfaces for the purpose set forth.
- 20 5. The combination with the pairs of rollers set forth in Claiming Clause 7 of conveyor belts for conveying the rubber from one pair of rollers to the next pair of rollers.
6. The machine for slicing, washing and rolling crude rubber constructed and arranged substantially as described and illustrated in the accompanying
25 drawings.

Dated this 31st day of December, 1912.

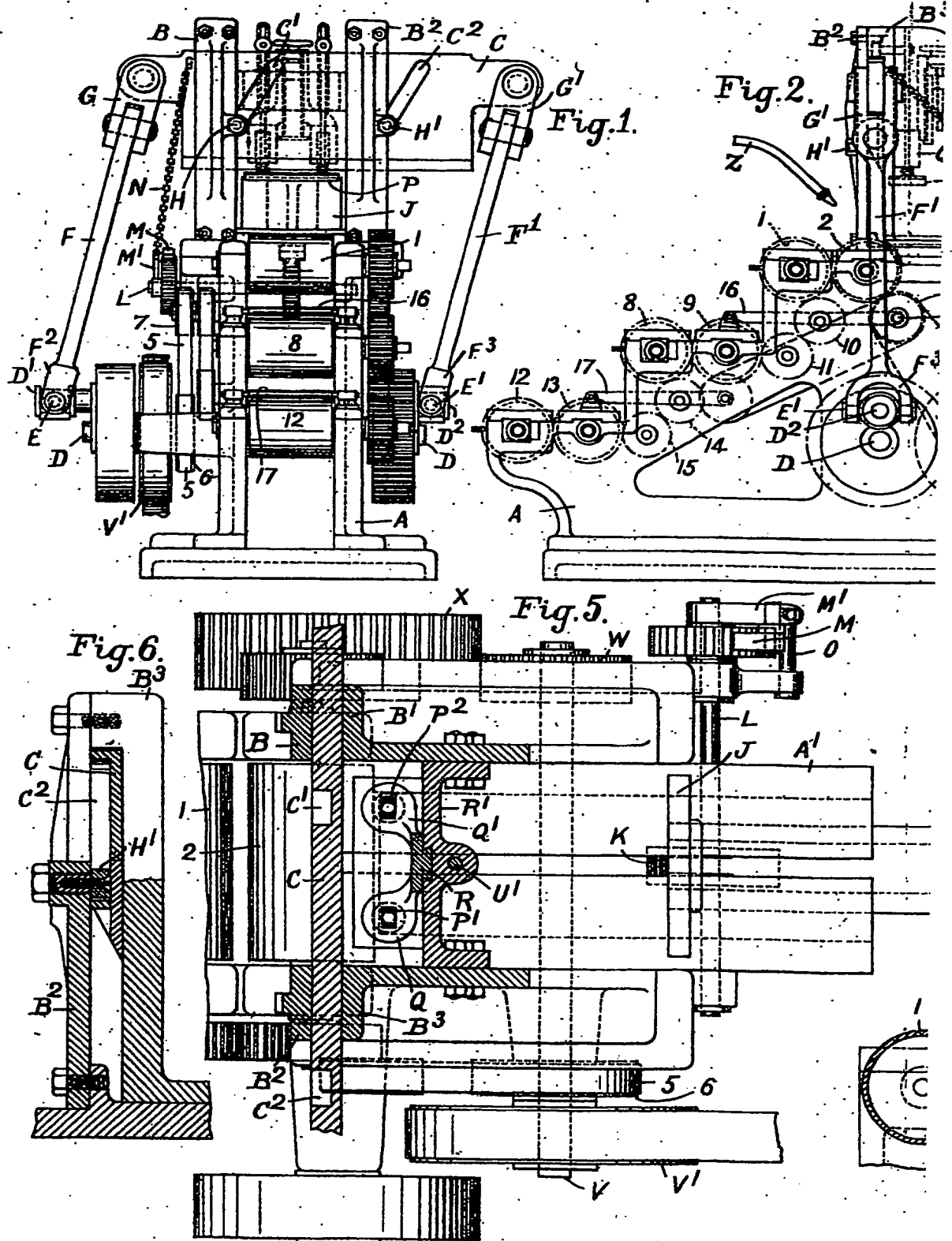
D. YOUNG & Co.,
11 and 12, Southampton Buildings, London, W.C.,
Agents for the Applicant.

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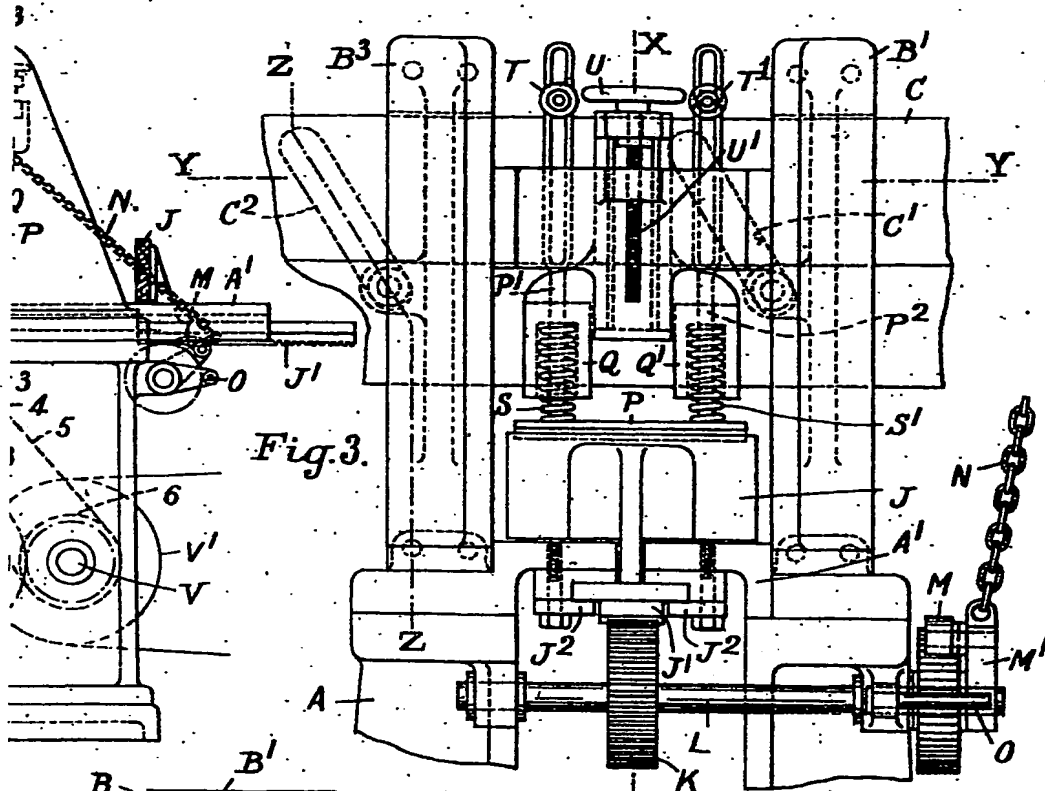


Fig. 3.

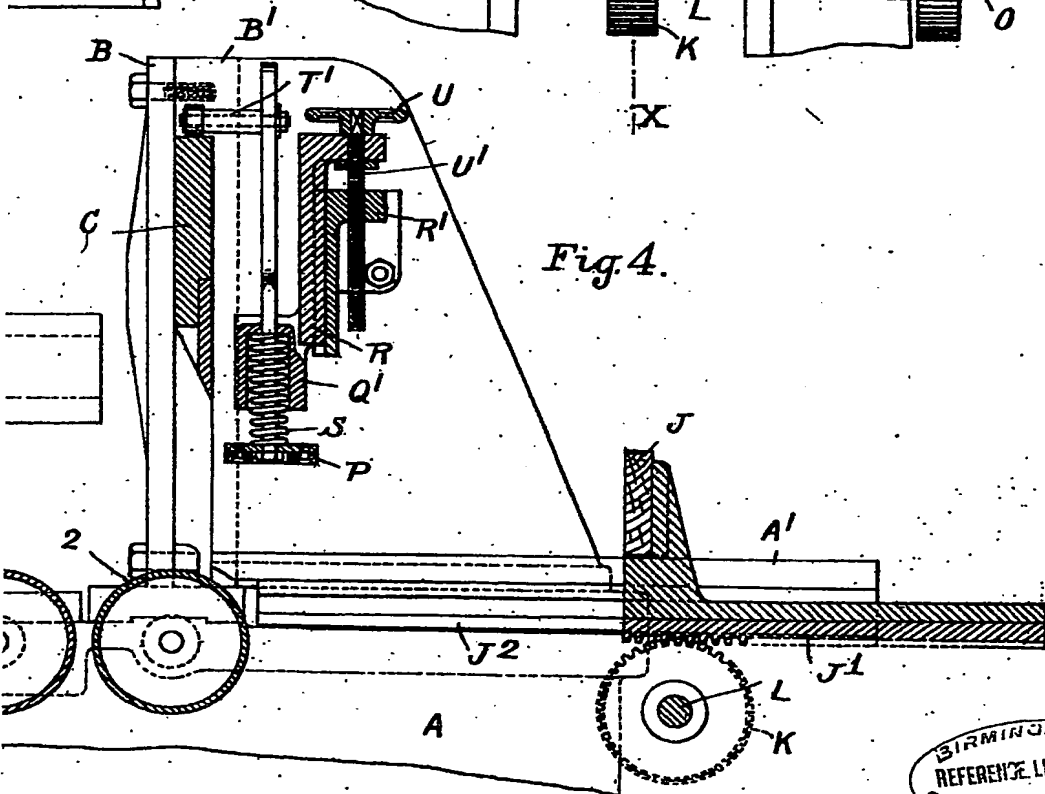


Fig. 4.

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